

## 355 Lactose Intolerance

<b>Area:</b>	<b>Summary of Updates: (Implemented Oct. 1, 2013)</b>
<b>Definition:</b>	One or more symptoms occurring after lactose ingestion: diarrhea, abdominal pain, flatulence, and/or bloating  (No change to assigning Risk 355 – must have been diagnosed by a physician or someone under a physician)
<b>Justification:</b>	<ul style="list-style-type: none"> <li>Lactose intolerance occurs because of a deficiency in the amount of lactase enzyme</li> <li>Lactose intolerance can be temporary or permanent</li> <li>The variables below determine whether a lactose intolerant person experiences symptoms: <ul style="list-style-type: none"> <li>✓ Amount of lactose ingested</li> <li>✓ Amount of enzyme in the intestine</li> <li>✓ Other foods eaten at the same meal/snack</li> <li>✓ The ability of the colon to handle lactose</li> <li>✓ Individual sensitivity to how the colon responds to lactose</li> </ul> </li> </ul> <p><b>Types of lactose intolerance -</b></p> <ul style="list-style-type: none"> <li>Primary lactase deficiency – develops during childhood from the absence of lactase enzyme</li> <li>Secondary lactase deficiency – results from small bowel injury/inflammation</li> <li>Congenital lactase deficiency – infant develops severe diarrhea from lactose in formula/breast milk</li> <li>Developmental lactase deficiency – occurs in premature infants of less than 34 weeks gestation</li> </ul> <p><b>Lactose is found in -</b></p> <ul style="list-style-type: none"> <li>Milk, milk-based formula, dairy products, foods made with dairy products</li> </ul> <p><b>Tolerance varies -</b> Some people avoid all dairy products. Others eat some dairy without discomfort, or tolerate it when eaten with other foods or an enzyme supplement (i.e. Lactaid tablets). Dairy that is treated with bacteria secreting lactase (i.e. yogurt, some cheeses) may be easier to tolerate because of relatively low levels of lactose.</p> <p><b>Lactose intolerance concerns –</b></p> <ul style="list-style-type: none"> <li>May result in inadequate intake of calcium, vitamin D, protein</li> <li>Risk of low bone mass, fracture, metabolic syndrome, hypertension, preeclampsia, obesity, some cancers</li> </ul> <p><b>Implications for WIC Nutrition Services –</b></p> <p>Through participant-centered counseling, WIC staff can (based on participant concerns/interests):</p> <ul style="list-style-type: none"> <li>Promote exclusive breastfeeding until 6 months and continued breastfeeding to age 1+ (except infants with congenital lactase deficiency will need a lactose-free formula)</li> <li>Counsel to include tolerated lactose-containing foods and sources of calcium, vitamin D, protein</li> <li>Tailor food packages to substitute or remove lactose-containing foods as needed</li> <li>Educate about how to plan balanced meals, snacks and eat out while limiting lactose-containing foods</li> <li>Route chart to RD for infants and children</li> </ul>
<b>Clarification:</b>	Lactose malabsorption can be diagnosed with a hydrogen breath test. Or patients may be asked to assess symptoms while avoiding dairy products for a period of time followed by a lactose-containing food challenge.